

## INSTALLATION BUNDLE WITH SPACER

### Abstract of the disclosure

A filling body is inserted together with a loose bundle of guide tubes during installation into the passage space of a protective duct, thus enlarging the bundle diameter (which reduces the buckling risk) and making crossing of the guide tubes impossible. The guide tubes are positioned along the outside of the filling body, providing access to the guide tubes during post-installation branching. The filling body may include radially projecting spacer ribs that separate the guide tubes, thereby preventing crossing movement and helical stranding. The guide tubes are thus constrained and carried along with the filling body in alignment with the spacer ribs, so that buckling, helical stranding and three-dimensional restrictions or tangles cannot occur.